

## TITLE

### ARM GUARD FOR PREVENTING RAPTOR NESTING

#### BACKGROUND OF THE INVENTION

1. Field of the Invention.

This invention relates to a device that prevents raptors from nesting on cross-armed utility poles and the process for preventing such raptor nesting.

2. Description of Prior Art.

Raptors cause several problems for the utility business. Raptors, principally ospreys, have changed their nesting habits from trees to the use of utility poles. This creates an enormous burden for the utility business. The utilities must provide service and at the same time must protect the raptors.

When the raptors nest on utility poles, the nests can cause outages, system operation blinks, as well as pole fires that damage utility equipment and burn the nests. The primary cause is the debris in contact with high voltage conductors.

The problem with raptor nesting on utility poles is that the raptors have touch contact with the utility lines, which in many cases have been fatal to the raptor.

Prior devices that have been used to prevent raptor nesting have generally suffered from too many weaknesses. Typically they consist of many parts, which can be difficult to install, and at the same time, tend to have different portions of the unit that the raptors can find a place or starting point to build their nests. For example, as shown in Patent No. 6,250,023B1, there are various points on the device where raptors can use a starting point for their nests.

What is needed is a simple device that is easy to install, is non-conductive, which would prevent the electrocution of the raptor and at the same time would stop the raptor from forming a nest on the structure.

#### SUMMARY OF THE INVENTION

It is the object of the present invention to provide a system that is, simple and easy to install, and is non-conductive and at the same time effective in preventing raptors from nesting on such structure. The system of the present invention is a cross-armed utility pole guarding device for preventing raptor nesting. It comprises a housing of non-conductive, non-sticky material. The top of the housing is sloped at an angle to prevent debris from accumulating at the top of the housing. A means for connecting the housing to a utility pole parallel to the cross-arms will preferably be drilling holes in the sides of the housing and the guarding device can be

screwed directly into the cross-arms at the sides so that the top prevents the raptors from nesting on the utility pole. Preferred embodiments of the invention are that the housing material is clear, having an ultra violet protective layer and having a continuous smooth surface. On some utility poles, the pole will actually extend through the housing and in that situation there would be two separate housing units with a gap of no more than 4 inches, preferably no more than 3 inches.

The method of preventing raptor nesting on cross arm utility poles is to attach the housing set out above on top of and parallel to said utility poles. This method of preventing raptor nesting has proven to be effective in the installations conducted to date.

### BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a perspective view of the present invention installed on a cross-armed utility end pole.

FIG. 2 is a perspective view of the present invention, installed on a cross armed utility pole having a pole jutting up between the middle of the housing.

FIG. 3 is a side view of the present invention.

FIG. 4 is an end view of the present invention.

FIG. 5 is an end view of a rounded embodiment of the present invention.

### DETAILED DESCRIPTION OF A PREFERRED EMBODIMENT

FIG. 1 is a perspective view of the present invention installed on a cross-armed utility end pole. The housing **20** is made of non-conductive, non-sticky material and has a sloped top to prevent debris from accumulating at the top of the housing. On the end pole shown, the housing completely covers the top **22** of the utility pole **10**. The housing **20** is one continuous smooth surface. The housing **20** is attached parallel to the cross arms **12** which are attached by supporting struts **16** to the utility pole **10**. The utility pole shown is an electrical utility pole and the bells **14** and the electrical wire **18** are shown attached to the cross arm.

FIG. 2 is a perspective view of the present invention installed on a cross arm utility pole and has a pole jutting up between the middle of the housing. This is by far the more common utility pole and since the top **22** of the utility pole **10** juts up above the cross arms **12** and has wire **18a** running through the top **22**, the housings cannot be continuous throughout. Therefore, there are two separate housing units **20a** and **20b** shown. The housing unit **20a** is on the street side of the utility pole **10** and the housing **20b** is on the curb side of the utility pole **10**. The spacing **30** between housing units **20A** and **20b** should be no more than 4 inches, otherwise there will be sufficient space for the raptors to start a nest in the space, preferably it would be less than 3 inches. As shown, the side **24** of the housing is screwed into the cross arm with the screws **26** as shown. Most cross arm utility poles have two cross arms and the sides of the housing are screwed directly into the cross arms. There are three cross arms shown in Fig. 2 necessitating the addition of a piece of wood **27**, screwed into the crossarms to screw the side **24** into with the screws **26**.

FIG. 3 is a side view of the housing of the present invention only and shows the holes 28 in the side 24 of the housing unit 20 for attachment to the cross arm of a utility pole.

FIGS. 4 and 5 are end views of two embodiments of the present invention. In FIG. 4 the angle 32 of the top of the housing 20 should be sufficiently small as to prevent debris from accumulating at the top of the housing. An angle of 90 degrees is shown in FIG. 4 and anything less than that should be sufficient to prevent debris from accumulating at the top of said housing. Increasing the angle above 90 degrees, would reach a point where debris could accumulate at the top of said housing and the raptors would be able to build a nest at the top of the housing. FIG. 5 shows a rounded top 20c of the housing. While the top is rounded, the slope should still be sufficient so that debris cannot accumulate at the top of the housing.